

**REMARKS**

Claims 1-9 and 11-66 are pending in the application. Favorable consideration is requested.

Claim 1 has been amended in line with page 3, line 23 (cartridge) and in line with Figures 1, 1a, 1b and 2, as well as page 8, line 12 to page 9, line 10 of the specification. Claims 17 and 12 have been amended in line with page 6, line 30 of the specification. No new matter has been added.

Claims 1 and 17 stand rejected under Section 112. Although applicant respectfully disagrees, applicant has amended the claims in order to cordially move forward with the prosecution of this application. Applicant submits that the amendments render the rejection moot.

Applicant notes with appreciation that the Examiner has withdrawn the previous art rejections. With respect to the new prior art rejections, they essentially cite two new references in an effort to assert obviousness rejections against all of the claims. The two new references are U.S. patent 5,722,947 to Jeppsson and U.S. Patent No. 5,518,378 to Nefitel.

With respect to the obviousness rejection involving Jeppsson (i.e., claims 1-4 and 8 stand rejected in view of Jeppsson), applicant submits that the claim 1 "cartridge" amendment renders the rejection moot. As stated in claim 1 (and shown on page 3, line 23 of the specification as well as the Figures), the claimed liquid distribution system is a "cartridge." In stark contrast to the applicant's claimed invention, the liquid distribution system disclosed and taught in Jeppsson is made of several separate elements, most of them communicating via a tubing system. All of these differences mean that the applicant's claimed liquid distribution system (cartridge) is structurally and functionally very different from the liquid distribution system disclosed and

taught in the Jeppsson reference. Applicant also respectfully disagrees with the Examiner's contention that all ports of the Jeppsson liquid distribution system that communicate with the pump are unidirectional ports (citing column 2, lines 65-67 of Jeppsson). Those lines of Jeppsson and all other portions of Jeppsson do not support the contention. For at least the foregoing reasons, Jeppsson does not render obvious the claimed invention.

All of the other prior art rejections attempt to combine the teachings of the Kamen and Neftel patents. For at least the following reasons, the Neftel peristaltic pump cannot be inserted into the Kamen liquid distribution system in order to arrive at applicant's claimed invention.

Applicant's claimed invention requires a peristaltic pump that is separate from the liquid distribution system. In contrast, the Kamen liquid distribution system includes two pumps within the system, and these two included pumps are membrane pumps – not peristaltic pumps. Thus, the Kamen assembly is quite different in structure and function than the claimed invention.

Indeed, Kamen teaches away from the claimed invention. Kamen teaches the use of two membrane pumps within the liquid distribution system. This teaches away from applicant's separate use of a peristaltic pump and a liquid distribution system.

Furthermore, a membrane pump or two membrane pumps -- as required by Kamen -- cannot serve a system like the applicant's claimed system where the liquid flows in only one direction.

For at least the foregoing reasons, one skilled in the art would not be taught to utilize or modify Kamen's device in order to arrive at the claimed invention. Not even hindsight could be used to modify Kamen to arrive at the claimed invention because doing so would run counter to the teachings and design of Kamen. As a result, applicant requests the withdrawal of the rejections based on Kamen.

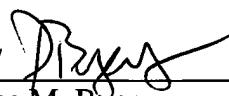
In view of the foregoing amendments and remarks, applicant submits that the application is in condition for allowance. A notice to that effect is earnestly solicited.

If the Examiner has any questions concerning this case, the undersigned may be contacted at 703-816-4009.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

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